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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/824,163	Applicant(s) PRYOR, BRUCE A.	
	Examiner Diego Herrera	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/14/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 & 14-30 is/are rejected.
- 7) ☒ Claim(s) 4-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 14-15, 17-18, 20-22, 25-26 & 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Hidem et al. (U.S. Patent # 5,749,052).

1. Regarding claim 1, 22 & 28, Hidem et al. discloses and shows a banded billing method for telecommunication services (Abstract) comprising:
 - a. Maintaining in data storage (col. 2, lines: 7-11, Hidem et al. teaches the use of memory to store data) a banded-pricing schedule that divides a continuum of minutes of use into a series of contiguous, mutually-exclusive minute-ranges (Abstract, col. 2, lines: 10-18, Hidem teaches the schedule of divided time periods with the ranges) and that specifies for each minute-range a respective cost (col. 2, lines: 7-18, Hidem teaches the ranges where the cost of such is displayed with there respective time period);
 - b. Determining a number of minutes of telecommunication service that were used by a given subscriber during a given period (Abstract, col. 2, lines: 7-18, Hidem teaches the use of a timer which is indicative of how long the call placed took);
 - c. Querying the banded-pricing schedule to determine which minute-range the number of minutes falls into (Abstract, Fig. 7C, Fig. 7E, col. 2, lines: 7-18, Hidem teaches the tracking of how much money the caller will have to pay for the service provided and it is determined by compiling the information recorded from the timer and the call rate information), and to determine the cost specified by the banded-pricing schedule for that minute-range (Abstract, Fig. 7C, Fig. 7E, col. 2, lines: 7-18, Hidem

- teaches that the cost is determined by compiling the information recorded from the timer and the call rate information already stored in memory); and
- d. Billing the determined cost to the given subscriber, for use of the telecommunication service during the given period (Abstract, Fig. 7C, Fig. 7E, col. 2, lines: 7-18, Hidem teaches the tracking of how much money the caller will have to pay for the service provided and it is determined by compiling the information recorded from the timer and the call rate information).
2. Consider claim 2, and as applied to claim 1 above, Hidem et al. discloses and shows wherein each of a plurality of the minute-ranges defined by the banded-pricing schedule spans a plurality of minutes (Fig. 7C, Fig. 7A, Abstract, Hidem teaches the ranges of time and their prices in the mobile under rate table).
3. Consider claim 3, and as applied to claim 1 above, Hidem et al discloses and shows wherein each of the minute-ranges defined by the banded pricing schedule spans a plurality of minutes (Fig. 7C, col. 16, lines: 48-56, Hidem et al. teaches the use of rate tables).
4. Consider claim 14, and as applied to claim 1 above, Hidem et al. discloses and shows wherein the telecommunication service comprises wireless telecommunication service (Fig. 1, elements 14 & 10, Fig. 2, elements 14,18 & 22; Abstract, col. 2, lines: 44-51, Hidem teaches the use of cellular communication to communicate between network and mobile user, hence wireless telecommunication is used).

5. Consider claim 15, and as applied to claim 1 above, Hidem et al. discloses and shows wherein the telecommunication service comprises voice telecommunication service (col. 6, lines: 49-60; col. 2, lines: 44-64, Hidem et al. teaches the use of telecommunication service and system for voice communication).
6. Consider claim 17, and as applied to claim 1 above, Hidem et al. discloses and shows wherein determining the number of minutes of telecommunication service that were used by the given subscriber in the given period comprises extracting usage data from call detail records generated by one or more telecommunication switches (Abstract, col. 13, lines: 1-29; col. 2, lines: 7-18, Hidem teaches the use of a timer which is indicative of how long the call placed took, also the extraction of certain information for billing purposes during periods of time of usage).
7. Consider claim 18, and as applied to claim 1 above, Hidem et al. teaches and shows wherein the given period is a month (Fig. 6A, Fig. 6B, col. 13, lines: 47-53, Hidem teaches the limitation where the period can be a month).
8. Consider claim 20, and as applied to claim 1 above, Hidem et al. discloses and shows wherein billing the determined cost to the subscriber comprises recording the cost in a subscriber account record (col. 13, lines: 1-29, Hidem et al. teaches the said billing and sending of invoice to subscriber for usage and rates and call information stored for billing records of subscriber).
9. Consider claim 21, and as applied to claim 1 above, Hidem et al. discloses and shows wherein billing the determined cost to the given subscriber comprises

generating and sending to the given subscriber and invoice indicating the determined cost (col. 13, lines: 1-29, Hidem et al. teaches the said billing and sending of invoice to subscriber for usage and rates and call information).

10. Consider claim 25, and as applied to claim 22 above, Hidem et al. discloses and shows wherein the telecommunication service comprises wireless telecommunication service (Fig. 1 & 2, Abstract, col. 2, lines: 44-51, Hidem teaches the use of cellular communication to communicate between network and mobile user, hence wireless telecommunication is used).
11. Consider claim 26, and as applied to claim 22 above, Hidem et al. discloses and shows wherein the telecommunication service comprises voice telecommunication service (col. 6, lines: 49-60; col. 2, lines: 44-64, Hidem et al. teaches the use of telecommunication service and system for voice communication).
12. Consider claim 29, and as applied to claim 28 above, Hidem et al. wherein each of the increment-ranges defined by the banded pricing schedule spans a plurality of increments (Fig. 7C, col. 16, lines: 48-56, Hidem et al. teaches the use of rate tables).
13. Consider claim 30, and as applied to claim 28 above, Hidem et al. discloses and shows wherein the telecommunication service comprises wireless telecommunication service (Fig. 1 & 2, Abstract, col. 2, lines: 44-51, Hidem teaches the use of cellular communication to communicate between network and mobile user, hence wireless telecommunication is used).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 16, 23-24, & 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidem et al. (U.S. Patent # 5,749,052) in view of Gurnani et al. (U.S. Patent # 6,947,723 B1).

14. Consider claim 16, and as applied to claim 1 above, Hidem et al. discloses and shows wherein the telecommunication service except comprises of a data telecommunication service, nonetheless, Gurnani et al. discloses a data telecommunication service (Abstract, col. 5, lines: 43-50, Gurnani teaches the limitation of having voice and/or data telecommunication services).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Hidem et al. to specifically contain a data telecommunication service as taught by Gurnani et al. for the purposes to offer a larger variety of services (col. 5, lines: 43-50).

15. Consider claim 23, and as applied to claim 22 above, Hidem et al. does not discloses and shows wherein the usage program logic is executable to receive and process call detail records and to extract usage information from the call detail records, nonetheless, Gurnani et al. teaches this limitation (col. 6, lines 42-56, Gurnani et al. teaches the limitation where a program is used to obtain information from the records of the user).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Hidem et al. to specifically have a program receive and process call detail records and to extract usage information from the call detail records as taught by Gurnani et al. for the purpose of obtaining data to estimate rate calculations (col. 6, lines: 55-57).

16. Consider claim 24, and as applied to claim 22 above, Hidem et al. discloses wherein the call detail records except the call detail records are generated by one

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or more telecommunication switches, nonetheless, Gurnani et al. discloses said record generation by one or more telecommunication switches (col. 5, lines: 51-67; col. 6, lines: 10-22, Gurnani teaches the use of many switches to monitor information of the wireless communication system).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Hidem et al. to specifically monitor the communication to create detail records of information as taught by Gurnani et al. for the purpose of

17. Consider claim 27, and as applied to claim 22 above, Hidem et al. discloses wherein the telecommunication service except comprises of a data telecommunication service, nonetheless, Gurnani et al. discloses a data telecommunication service (Abstract, col. 5, lines: 43-50, Gurnani teaches the limitation of having voice and/or data telecommunication services).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Hidem et al. to specifically contain a data telecommunication service as taught by Gurnani et al. for the purposes to offer a larger variety of services (col. 5, lines: 43-50).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hidem et al. (U.S. Patent # 5,749,052) in view of Awada et al. (U.S. Patent Application Publication # 2003/0050044 A1).

18. Consider claim 19, and as applied to claim 1 above, Hidem et al. does not discloses and shows treating as a minute of use any partial minute used at a conclusion of a communication session, nonetheless, Awada et al. teaches the limitation (Abstract, title, Paragraph [0006] & [0008], Awada teaches keeping track of the time used by subscriber and forms of what service providers use to bill the subscriber).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Hidem et al. to specifically include treating as a minute of use a partial used minute at a conclusion of a communication session as taught by Awada et al. for the purpose of billing implementations by service providers (Paragraph [0009]).

Allowable Subject Matter

Claims 4-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following is a list of the prior art considered:

- Marsh et al. (U.S. Patent 6,574,465 B2), "System and method for determining optimal wireless communication service plans".

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- Dahm et al. (U.S. Patent 6,301,471 B1), "Online churn reduction and loyalty system".
- Hiromichi (U.S. Patent 6,353,736 B1), "Information communication terminal with charging management function".
- Savolainen (U.S. Patent 6,327,466 B1), "Method and arrangement for setting the charge rate in a wireless pay phone".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diego Herrera whose telephone number is (571) 272-0907. The examiner can normally be reached on Monday-Friday, 6:30AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G. Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DDH


NICK CORSARO
PRIMARY EXAMINER